

# Mineral Industry Surveys

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## FLUORSPAR IN THE THIRD QUARTER 2001

Reported consumption of fluorspar in the third quarter was 139,000 metric tons (t), nearly 9% lower than in the previous quarter and 24% higher than in the third quarter of 2000. The increase over the same period last year was mainly the result of more complete consumption data collected on fluorspar's merchant markets. Consumption of fluorspar for hydrofluoric acid (HF) and aluminum fluoride production was 113,000 t, a decrease of nearly 9% from the previous quarter, but 11% higher than in the third quarter of 2000. Imports of fluorspar were 87,600 t, 39% lower than in the previous quarter and 40% lower than in the third quarter of 2000.

#### **Industry News**

According to preliminary data from Cámara Minera de México, Mexico's fluorspar production totaled nearly 425,000 tons year-to-date through August 2001. This would put its annual production on a pace similar to 2000, when Mexico produced 635,000 tons.

South Africa's production through the third quarter of 2001 was 196,000 t, with export sales of about 157,000 t, according to monthly statistics from the South African Department of Minerals and Energy.

The International Fluorspar Conference 2002 will be held in Tucson, AZ, on March 17-19, 2002. The talks so far include discussions on global HF and fluorspar demand, aluminum fluoride, global fluoropolymer markets, Internet sources of information, Russian fluorspar, and three on Chinese fluorspar. Information on attendance or presentation of papers is available from Clinton Justice by e-mail at <jminerals@sympatico.ca> or by fax at (905) 844-8460.

### Fluorochemical News

Solvay Fluor und Derivate GmbH announced its decision to build a plant in Tavaux, France, for the commercial production of hydrofluorocarbon (HFC) 365mfc. Solvay anticipates that HFC 365mfc will capture a significant portion of the market currently held by hydrochlorofluorocarbon (HCFC) 141b for

the blowing of polyurethane foams (Solvay Fluor und Derivate GmbH, September 4, Further development in fluorinated specialties industrialization of Solkane ® 365mfc, accessed December 5, 2001, via URL http://www.solvay.com/fluor/en/frame news.html).

Solvay also announced that it had entered into talks with Italy's Montedison Group with an aim of acquiring 100% of Ausimont S.p.A. (and its holding company). Ausimont is a manufacturer of fluorinated specialties, which operates production and research and development sites in Europe and the United States (Solvay S.A., November 28, 2001, Solvay enters into one-to-one talks with Montedison aiming at the acquisition of Ausimont, accessed December 5, 2001, at URL http://www.solvay.com/news/press/pr2001/pr011128.htm).

Honeywell International Inc. announced that it had doubled the capacity for ultrahigh-purity HF at its plant in Seelze, Germany. This product is used in the manufacture of advanced integrated circuits from semiconductors. The decision to expand capacity was based on new business opportunities and increasing demand for ultrahigh-purity HF. Honeywell also produces this product at its HF plant in Geismar, LA (Honeywell International Inc., August 23, 2001, Honeywell doubles production capacity for ultrahigh-purity hydrofluoric acid, accessed December 5, 2001, via URL http://www.specialtychem.com/news/index.html).

Honeywell also announced that it had received approval for use of HFC 245fa as an aerosol solvent under the U.S. Environmental Protection Agency's Significant New Alternative Program. HFC 245fa replaces chlorofluorocarbon 113 and HCFC 141b in a variety of applications where the use of a nonflammable, low toxicity, and zero ozone-depletion-potential aerosol solvent is required (Honeywell International Inc., September 2001, Honeywell receives U.S. EPA approval for use of HFC-245fa in aerosol applications, accessed December 5, 2001, via URL http://www.specialtychemcom/news/index.html).

# TABLE 1 SALIENT FLUORSPAR STATISTICS 1/

(Metric tons, unless otherwise specified)

		2000	2001						
	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	Year to date			
Imports for consumption:	147,000	109,000	152,000	143,000 r/	87,600	383,000			
Value per ton, c.i.f U.S. port, acid grade	\$124	\$130	\$136	\$127 r/	\$142	\$135 2/			
Value per ton, c.i.f. U.S. port, metallurgical	\$80	\$89	\$76	\$79	\$82	\$79 2/			
Exports	4,830	5,790	4,570	6,020	5,290	15,900			
End of quarter stocks, consumer 3/	97,700	73,900	95,800	100,000	66,400	XX			
Fluorspar equivalent of imported hydrofluoric acid	52,200	43,700	40,600	46,200	41,000	128,000			
Fluorspar equivalent of imported cryolite	2,950	2,700	3,500	2,240	1,000	6,740			
Quarterly reported fluorspar consumption 4/	112,000	123,000	145,000	152,000	139,000	437,000			

r/ Revised. XX Not applicable.

TABLE 2
CONSUMPTION OF FLUORSPAR BY END USE AND ASSAY RANGE 1/
(DOMESTIC AND FOREIGN IN THE UNITED STATES)

#### (Metric tons)

	Se	cond quarter 2001					
	More than	Not more than		More than	Not more than		
	97% calcium	97% calcium		97% calcium	97% calcium		2001
End use or product	fluoride	fluoride	Total	fluoride	fluoride	Total	Year to date
Hydrofluoric acid and aluminum fluoride	124,000		124,000	113,000		113,000	352,000
Metallurgical	5,440	16,600	22,000	5,530	7,940	13,500	57,600
Other uses or products 2/	5,040	1,590	6,620	5,040	7,700	12,700	26,700
Total	134,000	18,200	152,000	124,000	15,600	139,000	437,000
Stocks, end of quarter 3/	100,000	NA	100,000	66,400	NA	66,400	XX

NA Not available. XX Not applicable. -- Zero.

<sup>1/</sup> Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2/</sup> Average value.

<sup>3/</sup> Because of a change in survey methodology, beginning with the first quarter 2001 stocks data are only available for hydrofluoric acid and aluminum fluoride.

<sup>4/</sup> Beginning with the first quarter 2001, data from distributors have replaced all consumption data except for hydrofluoric acid and aluminum fluoride.

<sup>1/</sup> Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2/</sup> Includes acid grade used in enamel, glass and fiberglass, steel castings, and welding rod coatings.

<sup>3/</sup> Because of a change in survey methodology, beginning with the first quarter 2001 stocks data are only available for hydrofluoric acid and aluminum fluoride.

TABLE 3 U.S. IMPORTS FOR CONSUMPTION OF FLUORSPAR, BY COUNTRY AND VALUE 1/2/2

			2001									
	Third quarter		Fourth quarter		First quarter		Second quarter		Third quarter		Year to date	
	Quantity	Value 3/	Quantity	Value 3/	Quantity	Value 3/	Quantity	Value 3/	Quantity	Value 3/	Quantity	Value 3/
	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)
Containing more than												
97% calcium fluoride:												
China 4/	108,000	\$13,400	45,000	\$6,340	108,000	\$15,000	93,800 1	r/ \$11,700 r.	69,600	\$9,990	271,000	\$36,700
France	78	27	20	13	59	20	60	20	98	33	217	53
Germany	172	20			17	8	17	8	18	11	52	19
Mexico	2,760	372	4,050	558	9,450	1,160	9,180	1,260	3,880	548	22,500	1,810
South Africa 4/	29,200	3,560	48,600	5,760	26,800	3,380	28,700	3,650	9,900	1,300	65,400	4,950
United Kingdom	·	-	182	23		·						
Total	140,000	17,400	97,900	12,700	144,000	19,600	132,000 1	r/ 16,700 r	/ 83,500	11,900	360,000	43,600
Containing not more than												
97% calcium fluoride:												
Canada			21	6	22	8	39	12	13	4	74	24
Mexico	7,560	593	11,100	988	7,680	573	11,600	891	4,080	331	23,300	1,800
United Kingdom	3	11	1	3	2	4	7	14			9	18
Total	7,560	604	11,100	997	7,700	585	11,600	917	4,090	335	23,400	1,840
Grand total	147,000	18,000	109,000	13,700	152,000	20,200	143,000	17,600	87,600	12,200	383,000	45,400

r/ Revised. -- Zero.

Source: U.S. Census Bureau.

 ${\bf TABLE~4} \\ {\bf IMPORTS~FOR~CONSUMPTION~OF~HYDROFLUORIC~ACID~1/}$ 

	2000				2001								
	Third quarter		Fourth quarter		First quarter		Second quarter		Third quarter		Year to date		
	Quantity	Value 2/	Quantity	Value 2/	Quantity	Value 2/	Quantity	Value 2/	Quantity	Value 2/	Quantity	Value 2/	
	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)	
Canada	7,950	\$9,490	7,500	\$8,900	7,220	\$8,380	6,210	\$7,500	7,580	\$8,670	21,000	\$24,500	
Japan	465	1,290	439	1,200	283	771	315	775	263	680	861	2,230	
Mexico	26,200	23,900	21,000	19,300	19,000	17,800	24,100	22,300	19,300	18,800	62,500	58,900	
Other 3/	214	380	183	222	514	649	161	189	174	250	849	1,090	
Total	34,800	35,000	29,200	29,600	27,000	27,600	30,800	30,800	27,300	28,400	85,200	86,800	

<sup>1/</sup> Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

<sup>1/</sup> Imports for consumption include imports of immediate entry, and warehouse withdrawals.

<sup>2/</sup> Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>3/</sup> C.i.f. at U.S. ports.

<sup>4/</sup> Data do not agree with published U.S. Census Bureau data owing to adjustments made by the U.S. Geological Survey.

<sup>2/</sup> C.i.f. at U.S. ports.

<sup>3/</sup> Includes China, France, Germany, Ireland, the Republic of Korea, and the United Kingdom.